# ARIZONA GAME AND FISH DEPARTMENT HABITAT PARTNERSHIP PROGRAM HABITAT ENHANCEMENT AND WILDLIFE MANAGEMENT PROPOSAL

PROJECT INFORMATION				
<b>Project Title: Collins Canyon Water Development</b>		Project No. 09-504		
Region/GMU: Region V/ GMU 35A	HPC:			
Project Type: New Water Development - Develop 1 wildlife guzzler in Collins Canyon drainage	wildlife drinker fed by	a 2,200 gallon fiberglass		
Project Description: Develop a perennial water source in Collins Canyon wildlife guzzler. A ground level wildlife drinker wil water for wildlife. (See Photos 1 and 2)	l be plumbed to the guz	zler to provide yearlong		
Additionally, a fence will be constructed around the in the area.	water source in the eve	nt that livestock are grazed		
Wildlife Species to Benefit: Gould Turkey (50%), W Other Wildlife of Concern: Black Bear, Game a	nd Nongame birds and			
Possible Funding Partners: National Wild Turkey F International	ederation, Arizona Dee	er Association, Safari Club		
Implementation Schedule:	NEPA Compliance: (in			
Beginning: September 1, 2009 Completed: Yes No Projected Completion Date: Not applicable				
PROJECT		Date: 110t applicable		
	ronding			
SBG Funds Requested: \$6,000.00				
Cost Share Funds: \$6,224.50				
Total Project Costs: \$ 12,224.50				
PARTICIPANT I	NFORMATION			
Applicant: John Millican	Address: 9035 Chandl	er Lane		
(please print) <b>Telephone: 520-508-4272</b>	Hereford, A	Z 85615		
Applicant:	Address:			
Telephone:				
AGFD Contact and Phone No.  Brad Fulk, Sector 8 Field Supervisor Region 5, Tucson 520-400-4575				
(If applicant is not AGFD personnel)				
Coordinated with: USFS, Sierra Vista District Date: July 29, 2009				
Glenn Frederick (Wildlife Biologist), James				
Heitholt (Rangeland Management Specialist)  August 11, 2009				
Douglas/Sierra Vista HPC Partnership AZGFD				
Brad Fulk, Field Supervisor, Regi	on 5, Tucson	August 11, 2009		

Applicant's signature:	Date: August 4, 2009
Game/Development Branch	
Habitat Enhancement Project Proposal	Page 2

#### SEND COMPLETED APPLICATIONS TO:

Game Branch
5000 W Carefree Highway.
Phoenix, AZ 85086
rthompson@azgfd.gov

WAS PROJECT PRESENTED TO THE LOCAL HPC? YES	<u>K</u> N	<b>NO</b>
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### HAS PROJECT BEEN SUBMITTED IN PREVIOUS YEARS? NO IF SO WAS IT FUNDED?

#### **NEED STATEMENT/PROBLEM ANALYSIS:**

Available, but underutilized habitat for whitetail deer is abundant throughout the Collins Canyon drainage. The limiting factor that suppresses the deer population throughout the area is suitable and available yearlong water.

Additionally, Gould's turkey, which were introduced into the Huachuca Mountains during the mid-1980s, are currently doing well, but available habitats are limited due to the lack of yearlong water and roost trees. Populations throughout the mountain range are tied to major riparian areas causing available habitats to be fragmented. Projects such as the Collins Canyon water development reduces this fragmentation which maximizes available turkey habitat and develops links between home ranges.

This drainage has perennial water at the headwaters in the form of Collins Tank, and at Parker Canyon Lake. Approximately, a stretch of 3 miles in between these two water sources have no perennial waters. Due to an administrative closure by the USFS, this area does not currently receive any livestock grazing, or vehicle use. The area has good to excellent habitat for Gould's Turkey and whitetail deer throughout the canyon, as well as, canyon slopes. Particularly, the north and northeast aspects of this canyon contain an abundance of roost trees in the form of Chihuahua and Apache Pine, and to a lesser degree, mature white oak.

The development of a reliable water source within the canyon will spatially improve the ability of whitetail and Gould's turkey populations to utilize the available habitat within the canyon and surrounding area.

#### PROJECT OBJECTIVES:

Provide yearlong water throughout the Collins Canyon drainage through the installation of 1 wildlife guzzler and drinker that is provided water through a 2,200-gallon fiberglass wildlife storage tank. Water will be collected in the wildlife guzzler by yearly rainfall that averages between 15"-20"/year.

Canyon drainage. This will allow the existing whitetail population to utilize existing habitats that are currently unavailable on a yearlong basis due to water limitations.

The riparian area is made up of a gallery of Chihuahuan and Apache pines, which provide excellent roost habitat for Gould's Turkey. Currently, turkeys do not inhabit this area on a yearly basis, but are found in close proximity within many of the Huachuca Mountain drainages, along with areas below Parker Canyon Lake. The proposed water source will enhance available turkey habitat, especially where roost trees are located within the canyon, due to its location. Additionally, the added water will allow for less movement, particularly during early brood raising periods.

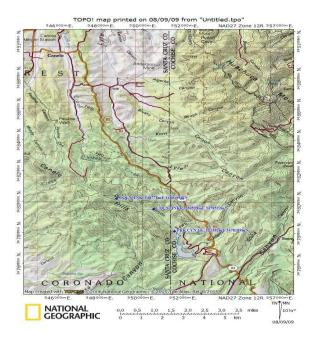
The drainage also has excellent brood habitat, along with yearlong feeding habitat. No livestock grazing is currently permitted throughout the canyon, and vehicle access into the canyon is blocked through an administrative closure by the USFS.

#### **PROJECT STRATEGIES:**

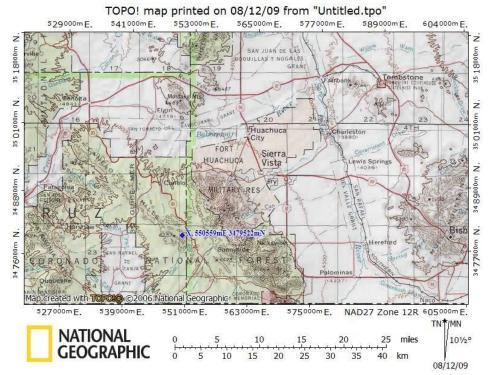
Utilize various SBG funds, along with available materials and volunteers from the Huachuca Gould's Chapter of the NWTF, and Huachuca Whitetail Club to construct a fiberglass wildlife water guzzler, plumb in a ground level drinker, and construct a wildlife fence around the perimeter of the water source.

Even though the area is currently rested from livestock grazing, the Forest Service is looking into developing the area as a seed bank that would be utilized for grazing in emergency situations only. Therefore, the construction of a fence will be completed by volunteers of the Huachuca Gould's Chapter and Huachuca Whitetail Club. Materials will be provided by the Huachuca Gould's Chapter.

#### PROJECT MAP: GMU 35A, T23S, R18E, SE 1/4 of Section 12



#### **PROJECT LOCATION:**



provide landowner's name):

100% USFS, Sierra Vista Ranger District

## IF PRIVATE PROPERTY, IS THERE A STEWARDSHIP AGREEMENT BETWEEN THE LANDOWNER AND THE DEPARTMENT? NOT APPLICABLE

#### **HABITAT DESCRIPTION:**

Elevation ranges for this project vary from 5600 to 5800 feet. The habitat component ranges from mostly Madrean oak woodland and mixed encinal vegetational types. Many of the common species present are Arizona white oak (Quercus arizonica), Alligator juniper (Juniperus deppeana), Border pinyon (Pinus discolor), Sumac (Rhus spp.), Skunkbush (), Desert ceanothus (Ceonothus greggii), Mountain-mahogany (Cercocarpus betuloides), Silktassel (Garrya spp.), Schott's yucca (Yucca schottii), Manzanita (Arctostaphylos uva-ursi), Bullgrass (Muhlenbergia emersleyi), along with various native grasses and forbes.

The Collins Canyon riparian area consists of various age classes of Oak (Quercus spp.), Alligator juniper (Juniperus deppeana), Chihuahua pine (Pinus leiophylla var. chichuahuana), Apache (Pinus engelmannii), and Pinyon (Pinus discolor). Primary grasses found in these areas are Bullgrass (Muhlenbergia emersleyi) and Deergrass (Muhlenbergie regins)

#### **ITEMIZED USE OF FUNDS:**

#### **Materials List and Estimated Costs**

#### COST SHARE MATERIALS AND LABOR

<u>Item</u>	Unit	Quantity	Unit Cost (\$)	Cost (\$)
Drinkers, 15 in. x 24 in w/ 18 in. ramp, metal, sealed and	ea	1	650.00	650.00
painted, float valve and fittings				
Black pipe, 1¼ in. dia., HDPE, 160 psi	ft	150	.30	45.00
Bell reducer, galvanized, 1¼ in. to 1 in. inside threads	ea	2	4.00	8.00
Shut off valve, ball, brass, ¼ turn, 1¼ in.	ea	1	17.00	17.00
Shut off valve, ball, brass, ¼ turn, 1 in.	ea	2	15.00	30.00
Union, metal, galvanized, 1 in.	ea	2	4.00	8.00
Valve control box, rectangular, approx. 6 in. x 10 in., plastic, composition, or similar	ea	1	14.00	14.00
Nipple, galvanized, 4 in. x 1 in. dia.	ea	2	2.00	4.00

Nipple galvanized 2		3	1.50	4 50
Nipple, galvanized, 2 in. x 1 in. dia.	ea	ა	1.50	4.50
Elbow, galvanized, 1 ¼ in. dia.	ea	1	2.00	2.00
Elbow, galvanized, 1 in. dia.	ea	1	1.50	1.50
Pipe, steel, galvanized, 18 in. x 11/4 in. dia.	ea	1	2.50	2.50
Transition fitting, HDPE to threaded steel pipe, 1½ in.	ea	2	24.00	48.00
Metal T-posts, metal corner posts, barbed wire, smooth wire, and fence stays	600 linear feet			1,500.00
Labor, per diem, travel –10 volunteers for 2 days/ 8 hrs./day				3,390.00
USFS Arch. Clearance cost				500.00
Total				\$6,224.50

#### REQUESTED MATERIALS AND COST

8'X6'X12' Wildlife Water Guzzler, 2,200 gallons	ea	1	4,800.00	4,800.00
Freight and handling				1200.00
TOTAL				\$6,000.00

**BUDGET SUMMARY** 

Requested \$6,000.00 Cost Share \$6,224.50 TOTAL \$12,224.50

#### LIST COOPERATORS AND DESCRIBE POTENTIAL PARTICIPATION:

Douglas/Sierra Vista HPC – Review Grant Proposal

Huachuca Gould's Chapter – Provide materials and volunteers to develop and maintain water development (used as Cost Share to proposal)

USFS, Sierra Vista Distict – Provide arch. Clearance at project site

#### **PROJECT MONITORING PLAN:**

The Arizona Game and Fish Department will conduct winter whitetail and spring turkey surveys, with

assistance of volunteers from the Huachuca Gould's Chapter and Huachuca Whitetail Club. Volunteers with the Huachuca Gould's Chapter of the NWTF will conduct yearly surveys of the area and report their findings to the AZGFD in regards to turkey and wildlife sightings.

#### **PROJECT MAINTENANCE:**

The Huachuca Gould's Chapter of the NWTF, will conduct yearly checks of the development and make repairs, as needed.

## PROJECT COMPLETION REPORT TO BE FILED BY: John Millican

#### WATER DEVELOPMENT PROJECTS (see attached worksheet):



Photo 1: Wildlife Water guzzler/storage tank

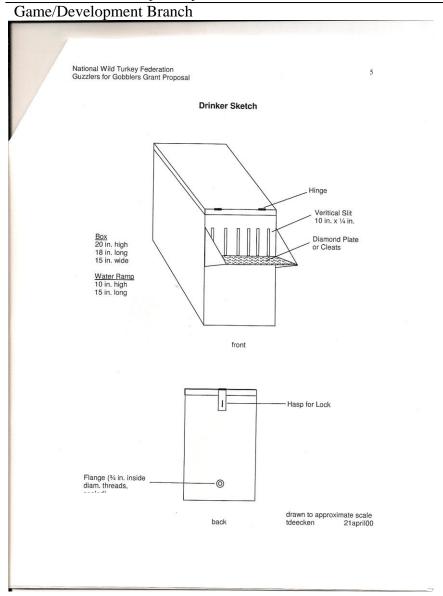


Photo 2: Drinker Sketch

## ARIZONA GAME AND FISH DEPARTMENT WATER DEVELOPMENT WORKSHEET

Is the water development listed as a priority in the most recent "Wildlife Water Development Annual Implementation Schedule?" NO
Please list the Development Branch personnel and date coordinated with for this project. Not applicable
What is the estimated annual inches of precipitation for the area? (mark one)2-44-66-88-1010-1212-14X14-16>16
Is there a perennial water source available to big game within four miles of this project?  _X_YES (please complete #5 below)NO (skip #5 below)
For the accessible, perennial water source nearest this project:  Name of water source: Parker Canyon Lake and Collins Tank  Type of water source (catchment, spring, dirt tank, etc.): Lake/ Dirt Tank  Ownership of water source: USFS  Distance in miles from project: Each is approx. 1 mile from project site
Is the target wildlife species a result of transplant efforts?X_YESNO
Please list any special land management status for the project site (i.e. Wilderness, National Park, National Monument, etc). If private land, list landowner.  NONE
Please provide the following information about access to the proposed site:  Type of access (mark one):2x4 vehicles _X_4x4 only _X_foot only**  **If foot access only: Distance in miles: Approx. hiking time: 4X4 access to within 200 yards utilizing ATV with trailer. Foot access to site within 200 yards.
Does access to this site require crossing private or tribal lands?YESX_NO
Please describe any restrictions to public access: USFS has gate closure due to group camp site and administrative area on north end of Parker Canyon Lake

## Habitat Enhancement Project Proposal Game/Development Branch

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Drinkers, 15 in. x 24	ea	1	650.00	650.00
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painted, float valve				
and fittings	£1	150	20	45.00
Black pipe, 1¼ in. dia., HDPE, 160 psi	ft	150	.30	45.00
Bell reducer,	ea	2	4.00	8.00
galvanized, 1¼ in. to	Ca	_	4.00	0.00
1 in. inside threads				
Shut off valve, ball,	ea	1	17.00	17.00
brass, ¼ turn, 1¼ in.				
Shut off valve, ball,	ea	2	15.00	30.00
brass, ¼ turn, 1 in.				
Union, metal,	ea	2	4.00	8.00
galvanized, 1 in.				
Valve control box,	ea	1	14.00	14.00
rectangular, approx.				
6 in. x 10 in., plastic, composition, or				
similar				
Nipple, galvanized, 4	ea	2	2.00	4.00
in. x 1 in. dia.	J	_		1100
Nipple, galvanized, 2	ea	3	1.50	4.50
in. x 1 in. dia.				
Elbow, galvanized, 1	ea	1	2.00	2.00
¼ in. dia.				
Elbow, galvanized, 1	ea	1	1.50	1.50
in. dia.			0.50	0.50
Pipe, steel,	ea	1	2.50	2.50
galvanized, 18 in. x 1¼ in. dia.				
Transition fitting,	ea	2	24.00	48.00
HDPE to threaded	Ca	_	27.00	40.00
steel pipe, 1½ in.				
Metal T-posts, metal	600			1,500.00
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wire, smooth wire,	feet			
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8'X6'X12' Wildlife Water Guzzler, 2,200 gallons	ea	1	4,800.00	4,800.00
Freight and handling				1200.00

10) Was a site visit completed? X Yes No
If Yes, please list personnel that attended and date.
USFS, Sierra Vista District office – Glenn Frederick, District wildlife biologist - December, 2008
James Heitholt, District Range Staff – July, 2009

Habitat Enhancement Project Proposal Game/Development Branch